Best Management Practices

MISSOURI DEPARTMENT OF CONSERVATION



Arkansas Darter

Etheostoma cragini

Common name • Arkansas Darter Scientific name • Etheostoma cragini Federal status • Candidate

Ecology

The historical range of the Arkansas darter is the Arkansas River drainage from Arkansas and Missouri westward to central Colorado. In southwestern Missouri, Arkansas darters inhabit shallow, clear, usually spring-fed streams with sandy bottoms or sloughs and other backwater areas of larger streams. They prefer slow currents in cool water with abundant watercress and other rooted aquatic vegetation. They feed on a variety of aquatic insects, especially mayflies, and some plant material. Spawning occurs in shallow water over a substrate of coarse gravel during mid-February to mid-July. Adult Arkansas darters typically reach a length of 1.6 to 2.2 inches.

Reasons for Decline

Although the Arkansas darter was historically considered uncommon throughout its range, it has declined in abundance, particularly in the western and central parts. It is susceptible to habitat loss resulting from irrigation diversions and through lowering the water table for irrigation and development. Livestock production, stream channelization, and other factors also have affected their abundance and distribution. Missouri may have the last remaining healthy population of this small perch.

Specific Recommendations

The presence of populations of the Arkansas darter may be an indication that our underground water supply is at a safe and sustainable level. Without underground aquifers, habitat for species such as the Arkansas darter will be gone, as will drinking water for humans.

- → Project activities should not occur below the high bank of the stream between March 15 and June 15.
- \rightarrow Erosion and sediment controls should be implemented, maintained, and monitored for the duration of the project.
- → Dams and impoundment structures should not be constructed in those streams where this species occurs.

- → Sand and gravel dredging activities should be avoided, or their impacts minimized, in streams within the range of this species.
- → If temporary roadways must be built, ensure that roadways are of low gradient with sufficient roadbed and stormwater runoff drains and outlets.

General Recommendations

Refer to Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers.

Information Contacts

For further information regarding regulations for development in rivers and streams, contact:

Missouri Department of Conservation Policy Coordination Section P.O. Box 180 2901 W. Truman Blvd Jefferson City, MO 65102-0180 Telephone: 573/751-4115

Missouri Department of Natural Resources Division of Environmental Quality P.O. Box 176 Jefferson City, MO 65102-0176 Telephone: 573/526-3315

> U.S. Army Corps of Engineers Regulatory Branch 700 Federal Building Kansas City, MO 64106-2896 Telephone: 816/983-3990

U.S. Environmental Protection Agency Water, Wetlands, and Pesticides Division 901 North 5th Street Kansas City, KS 66101 Telephone: 913/551-7307

> U.S. Fish and Wildlife Service Ecological Services Field Office 608 E. Cherry Street, Room 200 Columbia, MO 65201 Telephone: 573/876-1911

Disclaimer

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from other state agencies, contractors, and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat. Compliance with Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Other federal, state or local laws may affect construction practices.

2/2000